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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,556	03/17/2006	Shuichi Inoue	SHO-0127	5054
23353 7590 01/08/2008 RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			EXAMINER PATEL, ISHWARBHAI B	
			ART UNIT 2841	PAPER NUMBER
			MAIL DATE 01/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/572,556

Applicant(s)

INOUE, SHUICHI

Examiner

Ishwar (I. B.) Patel

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-28 is/are pending in the application.
- 4a) Of the above claim(s) 26 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-16 and 28 is/are rejected.
- 7) ☒ Claim(s) 17-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/17/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of specie I, claims 14-25 and 28 in the reply filed on October 15, 2007 is acknowledged. The traversal is on the ground(s) that this application was filed under 35 USC 371 and the principles of unit of invention are to be used to determine the types of claimed subject matter and the combinations of claims to different categories of invention. This is not found persuasive because the different groups of claims are linked by a common technical feature, namely stripline structure. However, as shown by various references in the action below, stripline structure is old and known in the art, proving a lack of unity of invention.

The requirement is still deemed proper and is therefore made FINAL.

However, if a generic claim is allowed the claims which depend upon and include all the limitation of the generic claims will be rejoined and examined for patentability as stated in the previous action.

### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been received and placed of record in the file.

### ***Specification***

3. The disclosure is objected to because of the following informalities:

(a) "1B", line 8, and "1A", line 9, paragraph 0124, may be -- 2B—and -- 2A --, respectively.

(b) In paragraph 0126, 0127 and 0128, it appears that "4A" and "4D" are interchanged at various places. Also, to change the arrows in figure 1, respectively.

Appropriate correction is required.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 14-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 7,175,457 (hereafter Pat457). Although the conflicting claims are not identical, they are not patentably distinct from each other because (explained as follow):

Regarding claim 14, the claims of Pat457 discloses connecting sheet (line 6, claim 1 and line 1-4, claim 2) comprising a multilayer board constructed of plural boards that are laminated, a pair of external connecting terminals being in pressurized contact with two edges of the multilayer board (line 1-5, claim 1), the multilayer board comprising: a first high speed transmission line board having a stripline structure, that comprises a first elastomer sheet that has a fixed dielectric constant; plural first elastomer strips arrayed at two edges of the first elastomer sheet, that are electrically conductive between front and back surfaces; and plural first high speed transmission lines connecting two ends of the plural first elastomer strips and being formed in a pattern on the first elastomer sheet (line 15-25, claim 2); and a first surface layer board

(line 6-7, claim 1) that comprises a second elastomer sheet that is nonconductive, and plural second elastomer strips arrayed in association with the plural first elastomer strips, at edges of the second elastomer sheet, being electrically conductive between front and back surfaces (line 5-9, claim 2).

Regarding claim 15, the claims of Pat457 discloses the multilayer board is configured by the first surface layer board being laminated on the first high speed transmission line board, the plural second elastomer strips being arrayed in association with the first elastomer strips, at two edges of the second elastomer sheet, on the first surface layer board, the external connecting terminals being in pressurized contact with the plural second elastomer strips formed at two edges of the first surface layer board, and the external connecting terminals and the plural first high speed transmission lines being connected line (21-27, claim 1).

Regarding claim 16, the claims of Pat457 discloses the multilayer board further comprises: a second surface layer board (line 7-8, claim 1) that comprises a third elastomer sheet that is nonconductive, and plural third elastomer strips arrayed in association with the plural first elastomer strips, at one edge of the third elastomer sheet, being conductive between front and back surfaces; the multilayer board is configured with the first high speed transmission line board as a core board, and the first surface layer board and the second surface layer board are laminated opposing each other; on the first surface layer board the second elastomer strips are arrayed in

association with the first elastomer strips, at one edge of the second elastomer sheet; the second elastomer strips and the third elastomer strips are positioned at two edges of the multilayer board; one of one pair of external connecting terminals is in pressurized contact with the plural second elastomer strips formed at one edge of the first surface layer board; the other of the external connecting terminals is in pressurized contact with the plural third elastomer strips formed at the other edge of the second surface layer board; and the external connecting terminals and the plural first high speed transmission lines are connected (claim 1, line 1-5 and 21-27).

Regarding claim 28, the claims of Pat457 discloses the high speed transmission lines include differential signal lines that form a pair (claim 4).

***Allowable Subject Matter***

6. Claims 17-25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 17 and 19: The structural detail as recited in claims 17 and 19 in combination with other claimed limitations of base claim 14 and 16 has not been disclosed by the prior art of record taken alone or in combination.

Claims 18, 21-25 and 20 directly (or indirectly) depend upon claims 17 and 19 respectively and allowed for the same reason.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kikuchi (US Patent No. 6,573,600) in figure 1 and 2 discloses stripline structure of a general signal wire and differential signal wires.

Grim (US Patent No. 6,743,985) in figure in figure 3 and 4 discloses stripline structures.

Hayne (US Patent No. 6,423,909) in figure 6 discloses a stripline structure (column 3, line 20-25).

Yamaguchi (US Patent No. 6,734,370) in figure 1A-1B discloses a circuit board with traces on edge to have connection on the traces on the surface.

Kobayashi in figure 4 discloses an interconnect made of silicone rubber.

Nakamura (US Patent No. 4,201,435) discloses interconnectors made of Silicone Rubber (column 4, line 28-32).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ishwar (I. B.) Patel whose telephone number is (571) 272 1933. The examiner can normally be reached on M-F (8:30 - 5:00).




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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272 2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ibp  
January 2, 2008

  
Ishwar (I. B.) Patel  
Primary Examiner  
Art Unit: 2841